

**WORLD HEALTH
ORGANIZATION**



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In reply please refer to: B9/370/3 - VPH
Prière de rappeler la référence:

27 December 1976

Dear Dr Singer,

Recent progress in molecular genetics and cellular biology has opened new avenues to the modification of the genetic properties of living organisms.

The most relevant discoveries include the ability to fragment in controlled ways the macromolecules bearing genetic information, i.e. the nucleic acids, the organo-chemical synthesis of nucleic acids, the recombination of segments of nucleic acids derived from unrelated sources into biologically active structures, their transfer into selected host systems, the transplantation of nuclear material, the hybridization of somatic cells from phylogenetically distant species, etc.

Scientific and medical experts realize that these discoveries and their developments can greatly contribute to a deeper understanding of the structure of the genetic material, of its normal functions and its pathological deviations.

The recognition that the potential benefits, derivable from the practical applications of the resulting knowledge, are inextricably linked with potential risks, associated with the unpredictable outcome of some genetic manipulations, has led to a deep disagreement both among the scientists and the general public.

It is within the constitutional responsibilities of the World Health Organization toward the health and welfare of mankind to take appropriate steps to contribute to the identification and minimization of the risks, so that fruitful experimentation can continue with stringent safeguards for people inside and outside the laboratories. Accordingly, the Advisory Committee on Medical Research of the World Health Organization has requested the Director General to collect information concerning the establishment of regulations and procedures for the proper control of this work so as to guide countries to formulate and harmonize their policies in the area of genetic manipulations.

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A preliminary and essential part of such international cooperation should be the stimulation and organization of efforts to provide a quantitative estimate of the actual risks involved. This must replace the intuitive and largely emotional preconceptions characteristic of the opposing scientific views on this subject.

Within the WHO Special Programme on Safety Measures in Microbiology I am proposing, therefore, to initiate cooperative efforts aimed (1) to design appropriate experiments for the acquisition of relevant data in a reasonably short time; (2) to perform these experiments as quickly and safely as possible; and (3) to give wide publicity to the results so that they may be scrutinized by all those competent to do so.

The size of the problem calls for worldwide action. Similarly, the relevance of the potential benefits of this work should stimulate the interest of all the biomedical research institutions in the technologies involved.

The research centres active in the area of genetic manipulations should have more than an academic interest in the successful development of this initiative. Concerned and competent individual scientists are also urged to provide their collaboration.

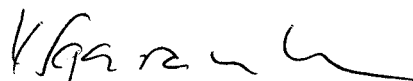
The secretary of the WHO Special Programme, Dr K. Bögel, will greatly appreciate receiving your comments on the above initiative and, in particular, your suggestions on the following points:

1. The kind of experiments, if any, you consider most likely to provide the information required,
2. The facility most suitable for the prompt and safe performance of selected key experiments,
3. The resources and time required for their realization.

Suggestions and comments should kindly be submitted to the WHO secretariat by 20 January 1977. I shall assist in the evaluation of the replies and the distribution of the resulting information to all those who contribute to this exchange of information and to all concerned parties.

Thank you very much for your help to us in this matter.

Yours sincerely,



Vittorio Sgaramella
Consultant, Special Programme on
Safety Measures in Microbiology